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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,662	03/18/2004	Phillip M. Starr	HES 2003-IP-009618U1	6012
29920	7590	04/21/2006	EXAMINER	
JOHN W. WUSTENBERG P.O. BOX 1431 DUNCAN, OK 73536			NEUDER, WILLIAM P	
			ART UNIT	PAPER NUMBER
			3672	

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/803,662	STARR ET AL.	
	Examiner	Art Unit	
	William P. Neuder	3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-80 is/are pending in the application.
- 4a) Of the above claim(s) 57-80 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-31, 39-50 and 53-56 is/are rejected.
- 7) ☒ Claim(s) 32-38, 51 and 52 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/18/04, 9/17/04, 7/12/05</u> | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restrictions

DETAILED ACTION

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-56, drawn to a downhole tool dissolvable by a chemical solution, classified in class 166, subclass 377.
- II. Claims 57-61 and 67-73, drawn to a downhole tool dissolvable by use of ultraviolet, classified in class 166, subclass 377.
- III. Claims 62-66 and 74-80, drawn to a downhole tool dissolvable by use of a nuclear source, classified in class 166, subclass 377.

The inventions are distinct, each from the other because of the following reasons:

Inventions of Groups I, II and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombinations II and III have separate utility such as they can be used to destroy parts not located in a well.

See MPEP § 806.05(d).

Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

During a telephone conversation with Mr. Wustenberg on 4/12/06 a provisional election was made with out traverse to prosecute the invention of Group I, claims 1-56. Affirmation of this election must be made by applicant in replying to this Office action. Claims 57-80 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,5,6-16,20-31,39-50 and 53 are rejected under 35 U.S.C. 102(b) as being anticipated by Owens et al 5607017.

Owens discloses a downhole tool 16 that is dissolvable when contacted with the well fluid. The well fluid being a chemical solution. As to claims 5 and 20, sheath 26 can be chosen to dissolve over a function of time. As to claims 6 and 41, the chemical solution can be stored in an enclosure 46 (figure 5). As to claim 7, a control mechanism 28 releases the chemical solution from the enclosure. As to claim 8, the enclosure is

frangible. As to claims 9 and 28, the control mechanism can be timer controlled. As to claims 10-12,25-27 and 29 the control mechanism 28 can be hydraulically, mechanically or electrically operated. Means 28 can also be operated by a communication means. (See col. 3, 26-57). As to claims 13-15 and 39, plug 16 is considered a bridge plug, frac plug or packer. As to claim 16, the method involves dissolving plug 16 by a chemical solution. As to claim 21, the chemical solution may be customized to achieve a desired dissolution rate. As to claims 22-24, the chemical solution can be applied to the tool before during or after downhole operation. As to claims 30 and 31, the chemical solution can be injected into the wellbore above the set plug. As to claim 42, the enclosure is in the tool. As to claims 43-48, control mechanism 28 can be hydraulically, mechanically or electrically operated and comprises a frangible enclosure body. The control mechanism can also be actuated by a line extending from the surface. As to claim 49, the activation means can be timer controlled. As to claim 50, the enclosure is broken to release the chemical. As to claim 43, casing 22 is a conduit for delivering the well fluid.

Claims 1-3,16-18,40 and 53-55 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 0681087 (GANO).

Gano discloses a downhole plug 70 that is removable by application of well fluid. The well fluid being the chemical solution. As to claims 2,3,17,18,54 and 55, the plug is formed from fiberglass and a binding agent. (col. 3, lines 44-56). As to claim 53, the casing forms a conduit for supplying the well fluid.

Claims 1,4,16,19,40 and 56 are rejected under 35 U.S.C. 102(b) as being anticipated by Grimmer 3211232.

Grimmer discloses a dissolvable sleeve 70 that dissolves when contacted with a chemical solution. As to claims 4,56 and 19, the chemical solution is an acidic fluid.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 4, 19 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owens et al (described above) in view of Grimmer (described above).

It would have been considered obvious to use an acidic solution to dissolve the plug of Owens as taught by grimmer in view of Grimmer's teaching that well tools can be dissolved by acidic solutions.


Allowable Subject Matter

Claims 32-38, 51 and 52 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Neuder whose telephone number is 571-272-7032. The examiner can normally be reached on Tuesday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


William P Neuder
Primary Examiner
Art Unit 3672

W.P.N.